



NOTICE TO STATE WATER PROJECT CONTRACTORS

NUMBER: 97-02

DATE: January 30, 1997

SUBJECT: Criteria for Bulletin
132-97

FROM: 
Director, Department of Water Resources

Attached for your information are copies of "Criteria for Bulletin 132-97 Project Operation Studies" and "Interest and Escalation Rates for Preparing Bulletin 132-97."

These criteria are being used by the Department of Water Resources in preparing information to be presented in Bulletin 132-97, "Management of the California State Water Project" and for determining the Water Contractors' Statements of Charges for 1998.

If you have any questions, please contact Donald Long, Chief of DWR's State Water Project Analysis Office, at (916) 653-4313 or Dave Knock, Chief of Financial Analysis and Future Facility Section at (916) 653-1894.

Attachments

Memorandum

Date : **JAN 15 1997**

To : 1. Stephen L. Kashiwada
2. Robert G. Potter
3. David N. Kennedy

From : Donald R. Long, Chief
State Water Project Analysis Office
Department of Water Resources

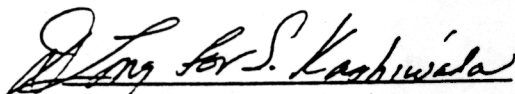
Subject: Criteria for Bulletin 132-97 Project Operation Studies

Attached is a summary of basic assumptions that we recommend for use in the State Water Project operations studies for Bulletin 132-97 and the water contractors' 1998 Statements of Charges. These assumptions reflect the Department of Water Resources' current planning for future facilities as well as future water management plans.

Assumptions on financing and repayment criteria are addressed in a separate memorandum.

If you have any questions or need additional information, please contact Dave Knock of my staff at (916) 653-1894.

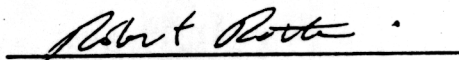
APPROVAL RECOMMENDED:



Stephen L. Kashiwada
Deputy Director

Date 1/16/97


APPROVAL RECOMMENDED:



Robert G. Potter
Chief Deputy Director

Date 1/17/97

APPROVED:



David N. Kennedy
Director

Date 1-21-97

Attachments

cc: Kathlin Johnson, Room 215-37
Arnold Johnson, Room 406-7

**CRITERIA FOR BULLETIN 132-97
PROJECT OPERATIONS STUDIES**

1. **Water Deliveries.** Water demands for the water operation studies will be based on the short-range, five-year (1997-2001) requests submitted by the contractors in October 1996, and the long-range (2002-2035) requests submitted by the water contractors in October 1994.
2. **Water Supply.** The water and power studies will reflect compliance with 1995 modification of SWRCB Decision 1485 (June 8, 1995, order 95-6), long-term NMFS Winter Run Biological Opinion as amended on May 17, 1995, and the long-term USFWS Delta Smelt Biological Opinion dated March 6, 1995. The water supply assumed for water and power operation studies will be as follows:
 - (a) **1997**--The initial operations study for 1997 will assume hydrology sufficient to deliver 2.7 MAF (includes 0.12 MAF of "sellers water" to be stored in project conservation facilities and made available for later sale and excludes 0.29 MAF of 1997-98 extended carryover water). Projections of power generation at Oroville will be based on the Oroville Reservoir inflow from the same hydrology. For generation at Pine Flat Reservoir, lower quartile inflow will be assumed. The 1997 water deliveries and water and power operations studies will be reviewed and finalized in March 1997, when the water supply forecast based on March 1, 1997 snow surveys becomes available.
 - (b) **1998**--State Water Project operations projected for 1998 are the basis for the 1998 Statements of Charges. The study will assume hydrology sufficient to deliver 3.1 MAF (contractor's projected entitlement requests). Lower quartile inflow will be assumed for Pine Flat generating facilities.
 - (c) **1999**--The 1999 studies will assume hydrology sufficient to deliver 3.5 MAF (contractor's projected entitlement requests). Lower quartile inflow will be assumed for Pine Flat generating facilities.
 - (d) **2000**--Assume hydrology sufficient to deliver contractor's projected entitlement requests of 3.4 MAF.
 - (e) **2001**--Assume hydrology sufficient to deliver contractor's projected entitlement requests of 3.6 MAF.
 - (f) **2002**--and thereafter--Assume hydrology sufficient to deliver contractor's projected entitlement requests of 4.2 MAF.

3. **Future Project Facilities.** The schedule for initial operation of future project facilities to be used when preparing information for Bulletin 132-97 is shown in the table on page 4. Future facilities include Phase I of the proposed East Branch Extension to the San Geronio Pass Water Agency service area.
4. **Water Supply Augmentation.**
- (a) **Delta Pumps.** The four new units became operational in early 1992. The total capacity of the Banks Pumping Plant increased from 6,400 cubic feet per second to 10,300 cfs; however, actual daily pumping volumes will be limited to the requirements specified in the U.S. Army Corps of Engineers permit (Public Notice 5820A, amended October 1981).
- (b) **Interim South Delta Facilities.** This program is one of a number of Delta programs to address corrective action for the Delta and to implement the Governor's Water Policy. Projected costs of the preferred alternative for the Interim South Delta Program will be included in the 1998 Delta Water Rate. Facilities included in this program are:
- Construction of four control structures (\$33 million). Three barriers are proposed in south Delta channels to provide for control of water levels, circulation and the flow of the San Joaquin River. The fourth barrier will provide protection for salmon migrating along the San Joaquin River.
 - Construction of a new multigate intake structure on the northeast corner of the existing Clifton Court Forebay (\$17.5 million), and some selected channel dredging (\$3.4 million) in a reach of Old River extending from north of the additional intake to Woodward Canal.
 - Under the program, the Department of Water Resources will acquire a U.S. Army Corps of Engineers permit under Section 10 of the Rivers and Harbors Act to enable increased pumping at the Banks Delta Pumping Plant up to the full 10,300 cfs capacity. The additional capacity will provide operation flexibility for the SWP by enabling increased pumping at times when impacts to fish are less.
- (c) **Interim North Delta Facilities.** The Interim North Delta Facilities will not be assumed operational in the near future and are unscheduled at this time. The long-term CALFED Bay-Delta resolution process is expected to

include a review of all options for fixing the Delta. In the meantime, the Department is suspending independent planning for North Delta facilities, which included channel dredging, levee improvements, testing of fish protective measures, wildlife and fisheries habitat enhancement, and enlargement of the Delta Cross Channel.

- (d) Ground Water Programs. On August 9, 1996, ownership of the Kern Fan Element Property and the La Hacienda Facilities was transferred to the Kern County Water Agency and Dudley Ridge Water District through the Kern Water Bank Authority as part of the Monterey Amendment. Fifty percent of any project water remaining in storage from the Berrenda Mesa Demonstration Program and the La Hacienda Water Purchase Program was also transferred to KWBA. The remaining 50 percent (approximately 42,828 acre-feet) remains SWP water and is subject to provisions of a recovery agreement with KCWA.
- (e) Other Project Yield. For purposes of preparing water and power studies for future years, it will be assumed that the Project will deliver full entitlement requests. Additional water supply needed to meet future delivery of requested entitlement water will be assumed to be available from development of unspecified future conservation facilities.

5. Power Operations. Annual energy prices in the western states' power markets are generally highest during the on-peak hours and summer months. Therefore, the aqueduct operation will be optimized to reduce power costs by minimizing on-peak and summer pumping within the constraints of operating criteria.

For Bulletin 132-97, forecasted SWP power operation will be based on existing and planned power sources for the next 20 years. Additional capacity and energy resources needed to meet power requirements will be from unspecified purchases.

In 1997 and after, projected energy deficits will be met with spot market energy purchases. The price for spot market energy for the next three years is projected to be between 21 and 30 mills per kilowatt-hour. By March 1997, the Department will conduct an energy study that will forecast annual on-peak and off-peak mills rates for 1997 and after. These mill rates will be used to determine power costs or revenues for energy purchased or sold on the open market.

FUTURE PROJECT FACILITIES	Dates for Initial Operation	
	Bulletin 132-96	Bulletin 132-97
CALIFORNIA AQUEDUCT San Luis Canal Enlargement (approx. 1,000 cfs)	Not Scheduled	Not Scheduled
COASTAL BRANCH Coastal Branch, Phase II Bluestone Pumping Plant Units 1,2,3,4, & 5 (25 cfs each)	November 1996	March 1997
Polonio Pass Pumping Plant Units 1,2,3,4, & 5 (25 cfs each)	November 1996	March 1997
Devil's Den Pumping Plant Units 1,2,3,4, & 5 (25 cfs each)	November 1996	March 1997
EAST BRANCH East Branch Enlargement - Stage 1 Mojave Siphon Powerplant Units 1,2, & 3 (960 cfs each)	June 1997	June 1996
East Branch Enlargement - Stage 2 Pearblossom Pumping Plant Units 10 & 11 (375 cfs)	Not Scheduled*	Not Scheduled*
Alamo Powerplant - Unit 2 (1,506 cfs)	Not Scheduled*	Not Scheduled*
San Bernardino Tunnel Intake	September 1997	May 1997
San Geronio Extension - Phase I	December 1997	August 1999
WEST BRANCH West Branch Enlargement Peace Valley Pipeline - second barrel	Not Scheduled	Not Scheduled
Warne Powerplant - additional units	Not Scheduled	Not Scheduled
Gorman Creek Channel Modification	October 1997	October 1997
DELTA FACILITIES Interim North Delta Facilities Interim South Delta Facilities Permanent Control Structures Additional Intake - Clifton Court Forebay	Not Scheduled June 2003 June 2001	Not Scheduled June 2003 June 2001
OTHER Los Banos Grandes Facilities Relocation of Project Operation Control Center Corporate Yard	Not Scheduled Not Scheduled Not Scheduled	Not Scheduled Not Scheduled Not Scheduled

*Final units assumed to be available for water and power operation studies to transport project water as needed to meet water delivery requests. Capital costs and minimum OMP&R costs of final units will not be included in Bulletin 132-96 because of uncertainty of scheduling.

Memorandum

Date : JAN 06 1997

To : 1. ~~Chester M. Winn~~ *cu* 3. ~~Robert G. Potter~~ *RP*
2. ~~Stephen L. Kashiwada~~ *SK* 4. David N. Kennedy

Donald R. Long, Chief
State Water Project Analysis Office
From : Department of Water Resources

Subject: Interest and Escalation Rates for Preparing 1998 Statements of Charges and
Bulletin 132-97

The State Water Project Analysis Office recommends that the Department of Water Resources use interest and cost escalation rates shown in Tables 1 and 2, attached, for:

1. Preparing State Water Project contractor charges for 1998
2. Preparing Bulletin 132-97
 - a. Capital and operating cost projections
 - b. Financial analysis studies
 - c. Projections of SWP bond costs
 - d. Projections of revenues from short-term investments of project funds

The information presented in Tables 1 and 2 has been coordinated with the Divisions of Fiscal Services, Planning, Engineering, and Land and Right of Way. These tables show the recommended interest and cost escalation rates, respectively. The rates assumed for Bulletin 132-96 are shown in parentheses.

Table 1 provides long-term interest rates to be used over the entire forecast period (i.e., 1997-2035). The interest rates are the same as those used for Bulletin 132-96.

Table 2 provides both short and long-term cost escalation rates. State salaries are not expected to increase this year; therefore, projected escalation for costs of State Operations was reduced to zero. The 1997 escalation rate for relocation and land and rights costs was reduced from 4 percent to 3 percent to reflect current market conditions. Because there have been no significant changes in long-range forecasts, all other escalation rates will remain the same as in Bulletin 132-96.

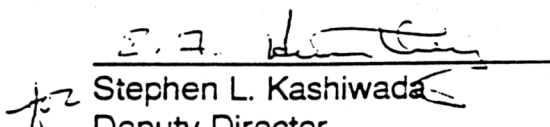
JAN 06 1997


Page Two

If you have any questions or need further information, please contact
Dave Knock at (916) 653-1894.

APPROVAL RECOMMENDED:

APPROVAL RECOMMENDED:



Stephen L. Kashiwada
Deputy Director


Robert G. Potter
Chief Deputy Director

Date 1/9/97

Date 1/10/97

APPROVED:


David N. Kennedy
Director

JAN 10 1997
Date _____

Attachments

cc: Frank Conti, Room 1641
Kathlin Johnson, Room 215-37
Arnie Johnson, Room 406-7

bcc: Jess Cason, Room 620-2
Dan Flory, Room 620-5
Tom Hanson, Room 604-3
Bruce Johnson, Room 335-7
Dan Herdocia, Room 335-12
Mike Cunnagin, Room 605
Peggy Bernardy, Room 1118-17
Susan Weber, Room 1118-20
Tommie Lee, Room 406-20

Coordinated with the Divisions of Fiscal Services, Planning, Engineering,
and Land and Right of Way.

TABLE 1
INTEREST RATES TO BE USED IN PREPARING DATA AND
INFORMATION FOR BULLETIN 132-97,
WATER CONTRACTORS' STATEMENTS OF CHARGES FOR 1998, AND
DEPARTMENT FINANCIAL ANALYSIS STUDIES

<u>Item</u>	<u>Interest Rate</u> ⁽¹⁾ <u>Per Year</u>	
1. Interest rates on future general obligation "Offset" bonds (If assumed sold) ⁽²⁾	5.5%	(5.5%)
2. Interest Rate for Water System Revenue Bond sale ⁽³⁾	6.0%	(6.0%)
3. Project Interest Rate for determining Statements of Charges for 1998	4.620%	(4.620%)
4. Interest rate on future short-term investment of project funds ⁽⁴⁾	6.5%	(6.5%)
1) For the purposes of Department studies, these rates are to be used as the effective rates of interest. Figures in parentheses are Bulletin 132-96 assumptions.		
2) "Offset" bonds are assumed to be repaid within 35 years of sale or shorter, with maturities commencing in the year following the date of sale and with equal annual bond service for the principal repayment period.		
3) All future revenue bonds are assumed to be repaid within 35 years of sale date or by the end of the Project repayment period (2035), whichever is shorter, with maturities commencing in the first year after the date of bond sale and with equal annual bond service for the principal repayment period.		
4) Based on the expected rate of return for funds invested in the State's Surplus Money Investment Fund.		

TABLE 2
BULLETIN 132-97
COST ESCALATION RATES
FOR SWP FACILITIES
TO BE USED FOR FINANCIAL ANALYSIS STUDIES

<u>Item</u>	<u>Percent Increase</u> <u>Per Year</u> ^{(1), (2)}			
	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000-2035</u>
<u>Capital Costs</u>				
State Operations (Salaries and Benefits)	0 (3)	3 (3)	3 (3)	3 (3)
Construction, Direct Pay	3 (3)	3 (3)	3 (3)	3 (3)
Relocation, Direct Pay	3 (4)	4 (4)	4 (4)	4 (4)
Land and Rights, Direct Pay	3 (4)	4 (4)	4 (4)	4 (4)
<u>Operations and Maintenance Cost</u> ⁽³⁾				
State Operations (Salaries and Benefits)	0 (3)	3 (3)	3 (0)	3 (0)

-
- 1) Statements of Charges for 1998 and Bulletin 132-97 will be based on unescalated January 1, 1997 capital costs.
 - 2) All figures in parentheses were Bulletin 132-96 assumptions.
 - 3) Operation and Maintenance costs in the Statements of Charges for 1998 and in Bulletin 132-97 are to be escalated through 1999 and held at that level for the remainder of the project repayment period. For specific project studies requiring escalated costs, continue the 3 percent rate for 2000-2035.